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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/870,241	05/30/2001	Akira Arai	9319A-000220	8821

27572 7590 09/25/2002

HARNESS, DICKEY & PIERCE, P.L.C.
P.O. BOX 828
BLOOMFIELD HILLS, MI 48303

EXAMINER

SHEEHAN, JOHN P

ART UNIT	PAPER NUMBER
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1742

8

DATE MAILED: 09/25/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicant N .

Applicant(s)

09/870,241

ARAI ET AL.

Examiner

Art Unit

John P. Sheehan

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 17-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 May 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- ☐ Interview Summary (PTO-413) Paper No(s). _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other:

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I, claims 1 to 16 in Paper No. 7 is acknowledged. The traversal is on the ground(s) that the inventions are so related to each other that an undue burden would not be placed on the Examiner by maintaining both groups of claims in a single application. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Further, to examine both sets of claims in the same application would require not only additional searching but also would require consideration of additional 112 issues, prior art, formulation of rejections, etc.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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4. Claims 1 to 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

I. In claim 1, line 3, "it" lacks a clear antecedent.

II. In claims 3, 5 and 6, the metes and bounds of the term "around room temperature" (claim 3, line 4; claim 5, line 3; and claim 6, line 4). What temperatures are considered to be "around" and not "around" room temperature?

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by each of Funkuno et al. (Funkuno, US Patent No. 5,665,177, cited by the applicants in the IDS submitted July 30, 2001) or Hackman et al. (Hackman, US Patent No. 4,930,565, cited by the applicants in the IDS submitted July 30, 2001) or Honeycutt (US Patent No. 4,945,974) or Bartlett et al. (Bartlett, US Patent No. 4,865,117).

Each of these references teaches a cooling roll with grooves. As evidenced by applicants' claim 11 the "dimple correcting means" of claim 1 encompasses grooves.

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See Funkuno, column 4, lines 61 to 68 and Figure 1; Hackman, Figures 9, 10 and 11; Honeycutt, the Abstract; and Bartlett, the Abstract).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2 to 10 and 12 to 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Funkuno et al. (Funkuno, US Patent No. 5,665,177, cited by the applicants in the IDS submitted July 30, 2001).

Funkuno teaches a cooling roll for making rare earth-iron-boron permanent alloy in the form of a ribbon wherein the cooling roll has grooves with a pitch of 100 to 700 um (column 5, lines 54 to 61), a depth of 1 to 50 microns (column 3, lines 20 to 25), with a pitch of 100 to 300 microns (column 3, lines 65 to 67). The grooves on Funkuno's cooling roll extend circumferentially (column 4, lines 61 to 63). Funkuno teaches that the cooling roll is comprised of a base and a surface layer, preferably Cr (column 6, lines 65 to 67) which has a thickness of 10 to 100 microns (column 7, lines 18 to 20) and a thermal conductivity less than the thermal conductivity of the cooling roll base (column 7, lines 1 to 6). In Figure 1, Funkuno teaches an embodiment wherein the entire surface of the cooling roll is grooved. In this embodiment the high points

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between the grooves are considered to be ridges, which as evidenced by applicants' claim 11, is encompassed by the instant claims.

The claims and Funkuno differ in that Funkuno does not teach the exact same values for the cooling roll characteristics but rather teaches ranges that overlap the claimed characteristics.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because where the claimed ranges overlap the prior art a prima facie case of obviousness exists, MPEP 2144.05.

Double Patenting

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1 to 16 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 to 17 of copending Application No. 09/833,806. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed cooling rolls in

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each of these two sets of claims overlap. Both sets of claims are directed to a cooling roll for manufacturing a ribbon-shaped magnetic material. The instant claims recite the presence of "dimple correcting means" while the claims in 09/33,806 recite the presence of "gas expelling means". However, each of these terms encompasses the presence of grooves on the cooling rolls. Accordingly, these two sets of claims are considered to overlap. In view of this overlap, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because where the claims overlap a prima facie case of obviousness exists, MPEP 2144.05.

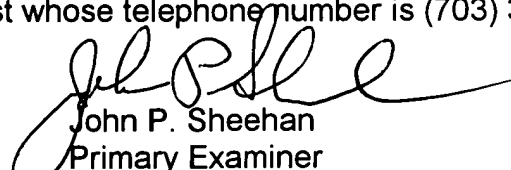
This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Sheehan whose telephone number is (703) 308-3861. The examiner can normally be reached on T-F (6:30-5:00) Second Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (703) 308-1146. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.



John P. Sheehan
Primary Examiner
Art Unit 1742

jps
September 22, 2002